

ABSTRACT

The digital data stream (e.g. ATM cell stream) replicating device features an input port for receiving a continuous digital data stream at an input transmission rate; a broadcast mechanism for replicating the input digital data stream N times; N output ports for transmitting each such replicated digital data stream through a separate output port at an output transmission rate at least equal to the input transmission rate; and a delay mechanism for introducing a relative delay for each said output digital data stream with respect to the input digital data stream such that the output streams are identical but out of phase with one another. Use of such a device enables a multi-port digital data communications device such as an ATM network switch to be tested using only one (expensive) performance test generator whilst still respecting the statistical multiplexing advantages of the multi-port digital data communications device.